T E C H N I C A L F I E L D V I S I T

Utah Coal Regulatory Program

June 6, 2003

TO: Internal File

THRU: Daron R. Haddock, Permit Supervisor

FROM: David W. Darby, Environmental Scientist III/Hydrologist

RE: Technical Field Visit, Mountain Coal Company, Gordon Creek 2, 7, & 8, C/007/016

Other Attendees: Dan Guy, Black Hawk Engineering, Consultant, Mountain Coal Company
Ray Hansen, Roads Maintenance Manager, Carbon County
Joe Helfrich, Reclamation Specialist/Biologist, DOGM
Steve Fluke, Reclamation Specialist/Hydrologist, DOGM

Date & Time: June 4, 2003
Arrive 1:15 PM departed 4:10 PM

PURPOSE:

This meeting was established with Ray Hansen to assess the county road conditions and to see if the county could redirect the flows to their original watershed. Joe Helfrich was conducting an inspection of the mine site. Steve Fluke is a new employee and attended as an observer. Steve will likely be the Division hydrologist for this mine. I attended to collect hydrologic information to see if Phase I bond release is feasible.

Dan Guy, Joe Helfrich, Steve Fluke and I met with Ray Hansen to discuss drainage controls on the county road above the Gordon Creek #2 mine site. A logging company had conducted logging operations in Beaver Creek, the canyon just north of the mine, a couple years earlier. The logging company used heavy equipment to re-cut and grade the road to get the logging truck into Beaver Creek. Their activities during the winter channelized flow down the road that cascaded into a canyon above the mine. The consolidation of flows down the road caused large mudflows that eroded the canyon slope which contributed more debris to the channel crossing the reclaimed mine pad. The excess flow caused some damage to the channel and added a good volume of sediment to the sedimentation pond. The operator was required to repair the channel. Since the county road adds more area and flows that exceed the design

standards of the channel, the permittee was notified that spillover from the county had to be diverted away from the mine site.

OBSERVATIONS:

We drove up the county road to an area above the mine site where flows from the road drained over the edge into the canyon. Pictures were taken of the site. Ray was aware of the problems with the road and was agreeable to suggestions. We both understood that the flow could be reduced by breaking the flows into small drainage areas. This would be accomplished by building several water bars across the road to sites that could temporarily capture the flow or directing them to the adjacent canyon. We identified several potential sites to construct the runoff diversions. Precautions will be taken to distribute the flows to avoid erosion. However, Ray mentioned that this was his busiest time of year and may not be able to give this project his full attention until fall.

During the logging operations, large volumes of sediment were deposited in the canyon above the mine site, along the main channel and in the sedimentation pond. Currently, the sediment level, measured by Dan Guy, has not exceeded the cleanout capacity of the sediment pond.

RECOMMENDATIONS/CONCLUSIONS:

I have observed and evaluated the Gordon Creek 2, 7 and 8 mine sites for Phase I bond release and have found the hydrologic structures to be well designed, intact and highly functioning.

I have considered the effects that the additional runoff has on the Phase I Bond release. For Phase I bond release the operator is required to reestablished the approximate original contour (AOC) of the surface and reestablish the drainage. The operator has done this, although drainage from the road has required them to reconstruct the channel once. Rains could again cause mudflows and damage to the channel before the county road is repaired. The operator will be required to repair any damage to the channel and clean the sedimentation pond as necessary to meet the requirements of the regulations.

The operator has met the obligations for Phase I bond release to date by backfilling and regrading the site to AOC, and reestablishing the drainages. The county road drainage affects the permit area, but is not under full control of the operator. I believe if any future damage is caused to the mine site by runoff from the county road, the operator will repair the mine site as they have met their obligations in the past, and as required by the regulations.

I recommend approval of the Phase I bond with regard to hydrology related features.